

DATA STORAGE DEVICE AND DATA SAVING METHOD THEREOF

ABSTRACT

A data storage device is applied to store digital medium data by using
5 the DRAM to replace the flash memories for data storage. The data storage
device comprises an interface converter used for transforming an interface
of a flash memory into an interface of a dynamic random access memory.
The interface converter is connected to a dynamic random access memory
10 for storing the data stored in the data storage device. Further, the data
storage device also comprises a battery capacity detector used to detect the
capacity of a battery connected with the data storage device and deliver a
signal representing the battery capacity into a controller. When the battery
capacity detector detects the battery capacity reaching a pre-determined low
15 electricity margin, the residual electricity is saved for the dynamic random
access memory to operate the saving of the data and the high
power-consuming components in the circuit are stopped.